Gulf of Mexico Harmful Algal Bloom Bulletin

17 February 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

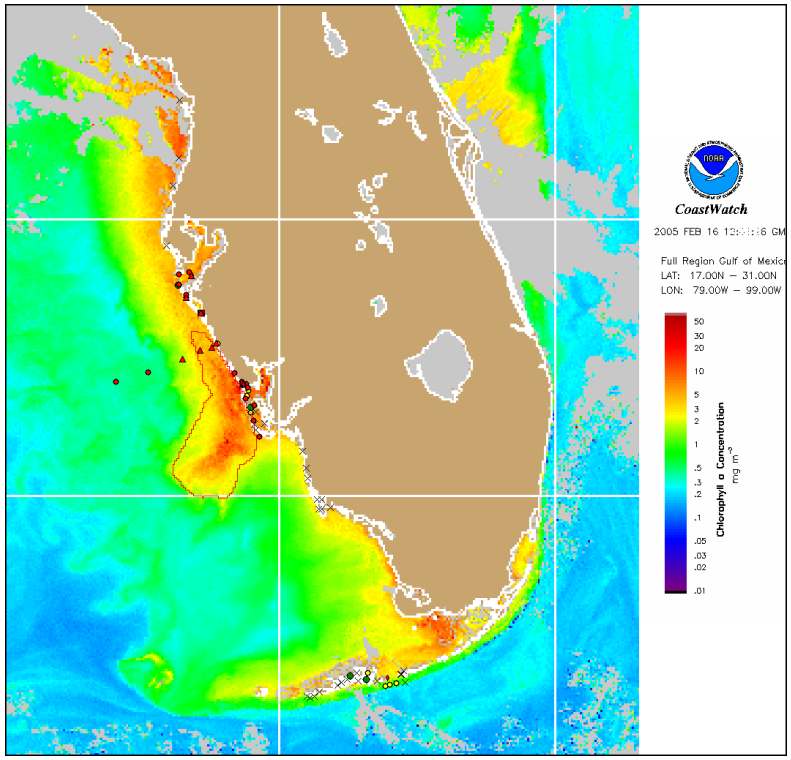
Last bulletin: February 14, 2005

Conditions: A harmful algal bloom has been identified off Sarasota, Charlotte, and northern Lee counties. Patchy low to moderate impacts are expected at the beach through the weekend with patchy moderate impacts Monday.

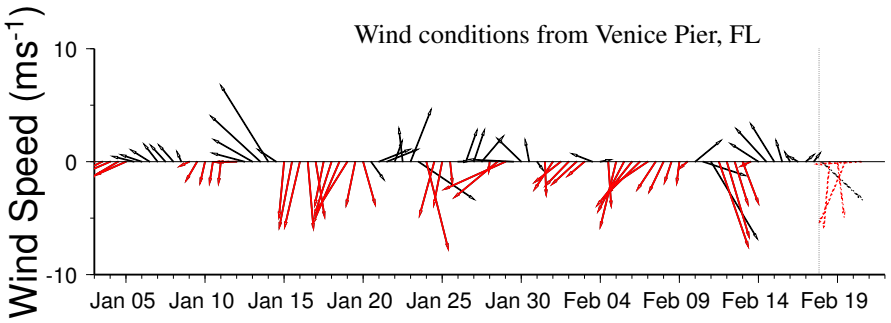
A harmful algal bloom as also been identified north and south of the lower Keys at Seven Mile Bridge. Reports of discolored water are possible.

Analysis: The *K. brevis* bloom persists from Sarasota to Sanibel and has continued to move south, as well as spread offshore to the southwest. Chlorophyll levels are above 20μg/L onshore near Boca Grande and are above 10μg/L throughout most of the rest of the bloom, with lower values at the offshore edges. The current bloom extent is alongshore from approximately 27°N to 26°23'N, with the southwest offshore extent at 25°56'N 82°38'W. Fish kills and respiratory irritation have been reported inshore from Longboat Key to Pine Island Sound, and offshore of Boca Grande and Captiva.

The bloom located north of the Keys continues to dissipate, and samples from February 10 showed only very low levels of Karenia north of the lower keys and northwest of Key West. The majority of the bloom lies north of Key West and the lower Keys, but there is one small section that has split off to the west, near the Marquesas, at 24°40'N 82°48'W. The northern part of the bloom is likely to maintain its location, with some slight western movement possible. The southern extent of the bloom which moved through Moser Channel last week into Hawk Channel is no longer detectable by imagery, indicating its continued dissipation. Fish kills were reported north of the lower keys and northeast of Key West last week. Chlorophyll levels of 3-4μg/L near Seven Mile Bridge may cause discolored water. -Stolz and Bronder

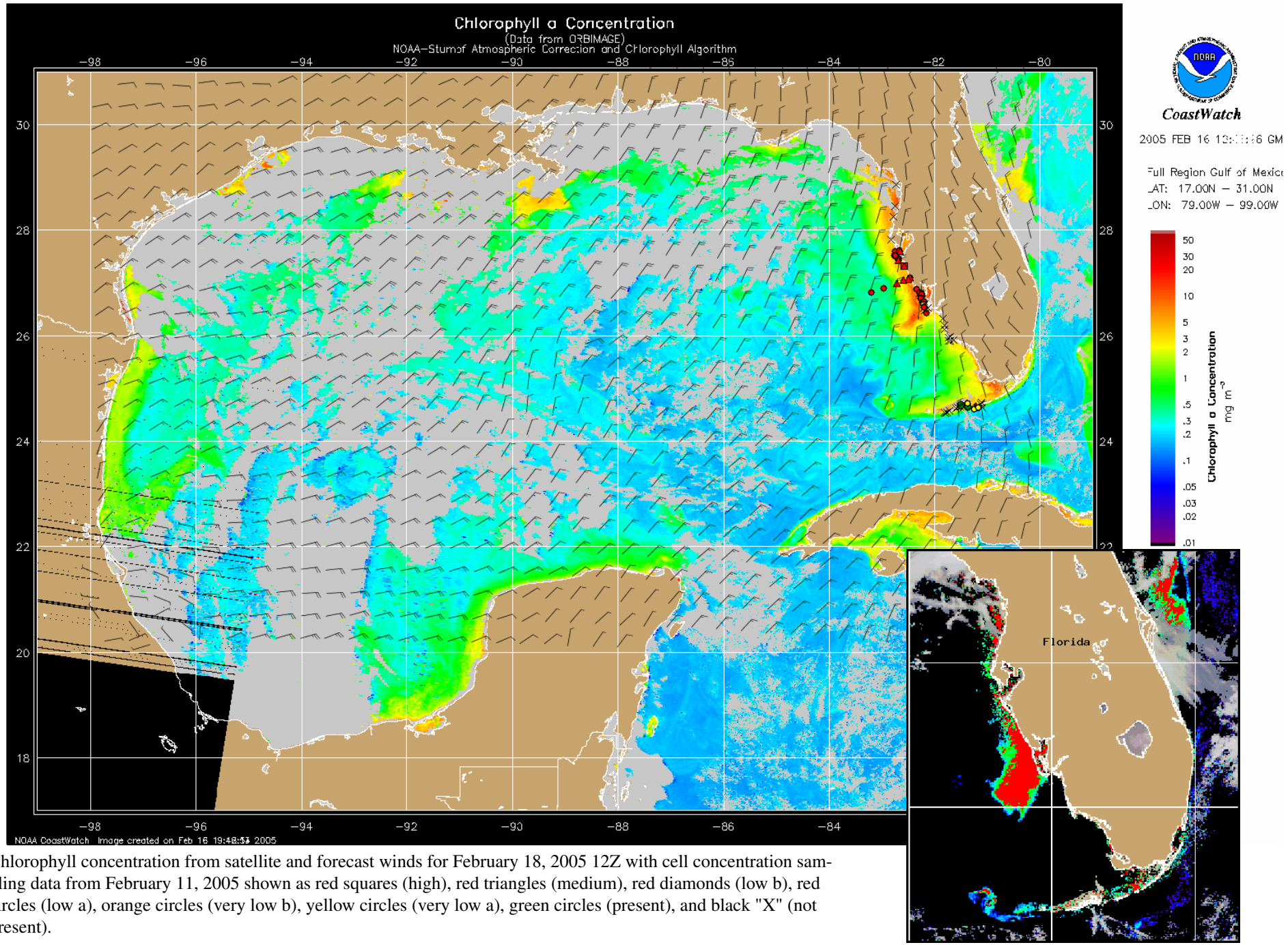


Chlorophyll concentration from satellite with possible HAB areas shown by red polygon(s). Cell concentration sampling data from February 11, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Venice: Northwesterlies tonight at 10-15 knots (5-8 m/s), becoming northerly through Friday. Northeast winds Friday night clocking around to the east Saturday, southeast Sunday, and south Monday. Keys: Winds light and variable today. Northwest to north winds tonight increasing to 10-15 knots (5-8 m/s), becoming northeast Friday and Saturday. Easterlies Sunday becoming southeast by Monday.



Chlorophyll concentration from satellite and forecast winds for February 18, 2005 12Z with cell concentration sampling data from February 11, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Blooms shown in red (see p. 1 analysis and image for interpretation)

Wind conditions from Sand Key, FL